

K102188

**510(k) SUMMARY**      AUG - 9 2011

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of 21 CFR §807.92.

**Submitter Information:**                      DFI Co., Ltd  
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Gyung-nam, (621-880), Korea

**Contact Person:**                              Ho Dong, Yang  
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#708 Le-Meilluer Town, 837-19 Yeuksam-dong  
Gangnam-gu, Seoul, Korea  
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**Date Summary Prepared:**                      Aug 05, 2011

**Device Name:**  
Trade Name(s):                      CYBOW Reader 300, CYBOW Reader 720  
Classification Name:                      Urinalysis system  
Panel:                                      clinical chemistry  
Product code:                              KQO, JIL, JIO, CDM, CEN, JIN, JIR, JJB, JMA, JMT, LJX

**Predicate Device Information:**  
K926359 / Clinitek 200+, 500

**Device Description:**  
CYBOW Reader 300, 720 are reflectance photometer. The strip is illuminated by white light, and there flected light from the strip is detected by a color Image Sensor. The RGB signals are digitized, and this digitized image is evaluated by the processor. The intelligent image analyzer SW locates the strip and the pads, and based on these color data the parameter values are determined. The results with the date and time of the measurement as well as the sequence number and the ID are stored and printed out by the internal printer.

**Intended Use:**  
The CYBOW Reader 300 and CYBOW Reader 720 urine chemistry analyzers are semi-automated analyzers intended to be used with CYBOW 11 and CYBOW 10 Reagent Strips as a test system to semi-quantitatively or qualitatively measure the specified analytes in urine as follows: glucose, urobilinogen, pH, ketone, occult blood, protein, bilirubin, ascorbic acid, nitrite, leukocyte, and specific gravity. These measurements are useful in the evaluation of renal, urinary and metabolic disorders. The CYBOW Reader 300 and CYBOW Reader 720 urine chemistry test systems are intended for prescription and in vitro diagnostic use only.

**Comparison to Predicate Device(s):**

This device is equivalent to the predicate devices in its intended use and technological characteristics, including:

- \* indications for use
- \* technological characteristics
- \* performance properties

**Non-Clinical Study performance**

Non-Clinical study was conducted on the CYBOW Reader 300 and CYBOW Reader 720 such as;

1. Analytical performance  
precision / reproducibility linearity / assay reportable range, detection limit, analytical specificity / limitation of test,
2. Comparison study  
Method comparison with predicate device, clinical study

The evaluation followed "Method Comparison and Bias Estimation Using Patient Samples; Approved Guideline (2002) NCCLS, EP9A.

Three independent laboratory evaluations of the New Device and Predicate Device were conducted. One evaluation one was Samsung Hospital (Site A, sample number: 255samples), the other was Authoritative local university hospital (Hospital at national Univ.of Pusan) (Site B, sample number: 280samples) and another was Authoritative local university hospital (Hospital at national Univ.of Dong Ai) (Site C, sample number: 332samples) for 20days. Three operators, reflective of the intended users of the devices, performed the testing at each site

**Conclusion**

Based on the information provided in this summary we conclude that CYBOW Reader 300 & 720 Urinalysis system are safe and effective and substantially equivalent to the predicate device K926359.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Silver Spring, MD 20993

DFI Co., Ltd  
c/o Mr. Ho Dong Yang  
CEO, Onbix Corporation  
#821 Samil Plaza, 837-26 Yeuksam-dong  
Gangnam-gu, Seoul  
Republic of Korea, 135-937

**AUG 09 2011**

Re: k102188

Trade/Device Name: CYBOW Reader 300 and CYBOW Reader 720 Urine Chemistry Analyzers

Regulation Number: 21 CFR §862.1340

Regulation Name: Urinary glucose (non-quantitative) system

Regulatory Class: Class II

Product Code: JIL, JIO, CDM, CEN, JIN, JIR, JJB, JMT, JRE, LJX, JMA, KQO

Dated: July 20, 2011

Received: July 26, 2011

Dear Mr. Yang:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

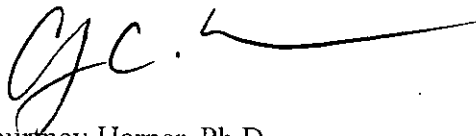
If your device is classified (see above) into class II (Special Controls), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

If you desire specific advice for your device on our labeling regulation (21 CFR Parts 801 and 809), please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (301) 796-5450. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'CHC', followed by a long horizontal line extending to the right.

Courtney Harper, Ph.D.  
Director  
Division of Chemistry and Toxicology  
Office of *In Vitro* Diagnostic Device  
Evaluation and Safety  
Center for Devices and Radiological Health

Enclosure

## Indications for Use Form

510(k) Number (if known): K102188

Device Name: CYBOW Reader 300 / CYBOW Reader 720

Indications for Use:

The CYBOW Reader 300 and CYBOW Reader 720 urine chemistry analyzers are semi-automated analyzers intended to be used with CYBOW 11 and CYBOW 10 Reagent Strips as a test system to semi-quantitatively or qualitatively measure the specified analytes in urine as follows: glucose, urobilinogen, pH, ketone, occult blood, protein, bilirubin, ascorbic acid, nitrite, leukocyte, and specific gravity. These measurements are useful in the evaluation of renal, urinary and metabolic disorders. The CYBOW Reader 300 and CYBOW Reader 720 urine chemistry test systems are intended for prescription and in vitro diagnostic use only.

Prescription Use X  
(Part 21 CFR 801 Subpart D)

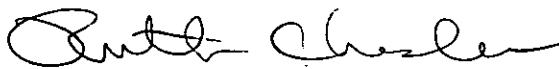
AND/OR

Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER  
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Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)



Division Sign-Off

Office of In Vitro Diagnostic Device

Evaluation and Safety

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